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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,171	01/18/2001	Gunnar Rodin	34648-00437USPT	7474

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EXAMINER	
WILSON, ROBERT W	

ART UNIT	PAPER NUMBER
2661	7

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/765,171	RODIN, GUNNAR	
	Examiner	Art Unit	
	Robert W Wilson	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 January 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 January 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.0 The application of Gunnar Rodin entitled "COMBINATION SWITCH AND ROUTING-SWITCHING RADIO BASE STATION" filed on 1/18/01which claims benefit of 60/177, 805 dated 1/25/2000 was examined. Claims 1-19 are pending.

Claim Rejections - 35 USC § 103

2.0 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.0 **Claims 1-5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (U.S. Patent No.: 5,781,547) in view of Comer

Referring to **Claim 1**, Wilson teaches: A combination switch in electronic communication with a telecommunication network (200 per Fig 2 or combination switch); wherein the telecommunication network includes at least one frame of circuit-switched data (col. 3 lines 1-24 & 213 per Fig 2) and at least one packet of Internet Protocol data (207 & 217 per Fig 2 receive well defined packet data protocols per col. 2 lines 43-67) comprising:

A time slot switch for receiving the at least one frame of circuit-switched data (204 per Fig 2 and col. 3 lines 1-24)

A router for receiving the at least one packet of Internet Protocol data in electronic communication with the time slot switch (203 per Fig 2 which receives well defined packet data protocols per col. 2 lines 43-67 is in communication with the 204 per Fig 2 or time slot switch)

Wilson does not expressly call for: at least one packet of Internet Protocol data but teaches receiving well defined packet data communication per col. 2 lines 43-67)

Comer teaches: Internet Protocol packets are used in packet switched networks per Pgs 17-19

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilized Internet packets for packet switching functions because they are a well defined protocol.

In Addition Wilson teaches:

Regarding **Claim 2**, further comprising: at least one central processing unit in electronic communication with the time slot switch and the router (CONTROLLER in the ROUTER CONTROLLER per Fig 2 or central processor)

Regarding **Claim 4**, wherein the time slot switch is implemented using at least one first digital signal processor in electronic communication with the at least one central processing unit (The primary reference teaches a time slot switch. The examiner takes official notice that it is well known in the art that distributive processing time slot switching architecture is well known in the art per Fig 2 of U.S. Patent No.: 6,381,238. It would have been obvious to one of ordinary skill in the art to utilize a central processor in a time slot switch with a DSP in order to set up a distributive processing architecture in order to have a time slot switch which can be scaled to support additional functions as the demand grows.)

Regarding **Claim 5**, wherein the router is implemented using at least one second digital signal processor in electronic communication with the at least one central processing unit (The primary reference teaches a router. The examiner takes official notice that it is well known in the art that distributive processing router architecture is well known in the art per Fig 2 of U.S. Patent No.: 6,687,220. It would have been obvious to one of ordinary skill in the art to utilize a central processor and DSP in a router in order to set up a distributive processing architecture in order to have a router which can be scaled to support additional functions as the demand grows)

In Addition Comer teaches:

Regarding **Claim 3**, wherein the at least one central processing unit executes a network management protocol (The primary reference teaches well known packet switching protocol. Comer teaches SNMP which is a subset of TCP/IP protocol per Pgs 564-565. It would have been obvious to utilize SNMP in the central processing unit because it is a subset of TCP/IP which is a well known protocol.)

Claim Rejections - 35 USC § 102

4.0 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.0 **Claims 6-[illegible]** are rejected under 35 U.S.C. 102(B) as being anticipated by Lev et. al. (U.S. Patent No.; 5,729,544)

Referring to **Claim 6**, Lev teaches: A routing-switching base station in electronic communication with a telecommunications network (301, 303, 305, 309, & 311 per Fig 3 or base station); wherein the telecommunications network includes at least one frame of circuit-switched data (311 per Fig 3 receives frames of circuit switched data) nd at least one packet of Internet Protocol data (309 per Fig 3 receives IP packets)

A combination time slot switch and Internet Protocol switch for receiving the at least one frame of circuit–switched data and the at least one packet of Internet Protocol data (NETWORK INTERFACER or 305 per Fig 3)

A plurality of transceivers, wherein each one of the plurality of transceivers is in electronic communications with the combination time slot switch and internet Protocol switch (309 & 311 per Fig 3 or plurality of transceivers)

In Addition Lev teaches:

Regarding **Claim 7**, wherein at least one of the plurality of transceivers receives a selected portion of the at least one frame of circuit-switched data from the combination time slot switch and Internet protocol switch (309 & 311 per Fig 3)

Regarding **Claim 8**, wherein at least one of the plurality of transceivers receives at least one packet of internet Protocol data from the combination time slot switch and Internet Protocol switch (309 & 311 per Fig 3)

Regarding **Claim 9**, further comprising: at least one central processing unit in electronic communication with the time slot switch and the router (NETWORK INTERFACE per Fig 3. The examiner takes official notice that distributive processing architecture is well known in the art per Fig 2 of U.S. Patent No.; 6,381,238. It would have been obvious to one of ordinary skill in the art to utilize a central processor in a time slot switch order to set up a distributive processing architecture in order to have a time slot switch which can be scaled to support additional functions as the demand grows.)

Regarding Claim 10, wherein the at least one central processing unit executes a network management protocol (The primary reference teaches IP. The examiner takes official notice that usage of SNMP which is network management protocol within the TCP/IP suite of protocols is well known in the art per Comer Pgs 564-565. It would have been obvious to utilize SNMP in the central processing unit as a network management protocol because it is a subset of the TCP/IP suite of protocols.

Regarding **Claim 11**, wherein the combination time slot switch and Internet protocol switch is implement using at least one digital signal processor in electronic communication with the at least one central processing unit (The primary reference teaches a router. The examiner takes official notice that it is well known in the art that distributive processing router architecture is well known in the art per Fig 2 of U.S. Patent No.: 6,687,220. It would have been obvious to one

of ordinary skill in the art to utilize a central processor and DSP in a router in order to set up a distributive processing architecture in order to have a router which can be scaled to support additional functions as the demand grows)

Regarding **Claim 12**, wherein at least one of the plurality of transceivers is a radio frequency transceiver (The applicant broadly claims radio frequency transceiver. The examiner interprets the wireless transceivers shown in Fig 3 of Lev as radio frequency transceivers)

Claim Rejections - 35 USC § 103

6.0 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7.0 **Claims 13-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lev (U.S. Patent No.: 5,729,544) in view of Wilson (U.s. Patent No.; 5,781,547)

Referring to **Claim 13**, Lev teaches: A routing-switching base station in electronic communication with a telecommunications network (301, 303, 305, 309, & 311 per Fig 3 or base station); wherein the telecommunications network includes at least one frame of circuit-switched data (311 per Fig 3 receives frames of circuit switched data) and at least one packet of Internet Protocol data (309 per Fig 3 receives IP packets)

A time slot switch and Internet Protocol switch for receiving the at least one frame of circuit–switched data (NETWORK INTERFACER or 305 per Fig 3)

A router in electronic communication with the time slot switch for receiving the at least one packet of Internet Protocol data (NETWORK INTERFACER or 305 per Fig 3)

A plurality of transceivers, wherein each one of the plurality of transceivers is in electronic communications with the combination time slot switch and internet Protocol switch (309 & 311 per Fig 3 or plurality of transceivers)

Lev does not expressly call for: a separate time slot switch and router but teaches a NETWORK INTERFACER or 305 per Fig 3.

Wilson teaches: a separate time slot switch (204 per Fig 2) and router (203 per Fig 2)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add a separate time slot switch and router function of Wilson to the routing-switching base station of Lev because they perform the same function as the NETWORK INTERFACER per Fig 3.

In Addition Lev teaches:

Regarding Claim 14, wherein at least one of the plurality of transceivers receives a selected portion of the at least one frame of circuit-switched data from the combination time slot switch and Internet protocol switch (309 & 311 per Fig 3)

Regarding **Claim 15**, wherein at least one of the plurality of transceivers receives at least one packet of internet Protocol data from the combination time slot switch and Internet Protocol switch (309 & 311 per Fig 3)

Regarding Claim 16, further comprising: at least one central processing unit in electronic communication with the time slot switch and the router (NETWORK INTERFACE per Fig 3. The examiner takes official notice that distributive processing architecture is well known in the art per Fig 2 of U.S. Patent No.; 6,381,238. It would have been obvious to one of ordinary skill in the art to utilize a central processor in a time slot switch order to set up a distributive processing architecture in order to have a time slot switch which can be scaled to support additional functions as the demand grows.)

Regarding **Claim 17**, wherein the at least one central processing unit executes a network management protocol (The primary reference teaches IP. The examiner takes official notice that usage of SNMP which is network management protocol within the TCP/IP suite of protocols is well known in the art per Comer Pgs 564-565. It would have been obvious to utilize SNMP in the central processing unit as a network management protocol because it is a subset of the TCP/IP suite of protocols.)

Regarding **Claim 18**, wherein the time slot switch and Internet protocol switch is implement using at least one digital signal processor in electronic communication with the at least one central processing unit (The primary reference teaches a time slot switch. The examiner takes official notice that it is well known in the art that distributive processing time slot architecture is well known in the art per Fig 2 of U.S. Patent No.: 6,381,238. It would have been obvious to one of ordinary skill in the art to utilize a central processor and DSP in a time slot switch in order to set up a distributive processing architecture in order to have a router which can be scaled to support additional functions as the demand grows)

Regarding **Claim 19**, wherein at least one of the plurality of transceivers is a radio frequency transceiver (The applicant broadly claims radio frequency transceiver. The examiner interprets the wireless transceivers shown in Fig 3 of Lev as radio frequency transceivers

Conclusion

8.0 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Kalliokulju et. al.; U.S. Patent No.: 6,385,451dated 5/7/2002 in which he discloses a WCDMA system which supports both circuit switching and packet switching which are sent in WCDMA time slots as shown in Fig 5.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W Wilson whose telephone number is (703) 305-4703. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Robert W. Wilson

Robert W Wilson
Examiner
Art Unit 2661

RWW
August 3, 2004

DANG TON
PRIMARY EXAMINER